

Linguistic and metalinguistic training to support use of audio 'chunks' in language revitalisation

ICLDC6 - Connecting Communities, Languages & Technology

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the
MARCS
institute



ARC CENTRE OF EXCELLENCE FOR
THE DYNAMICS OF LANGUAGE



Community Context

Location: Jilkmिंगgan 135km south-east of Katherine

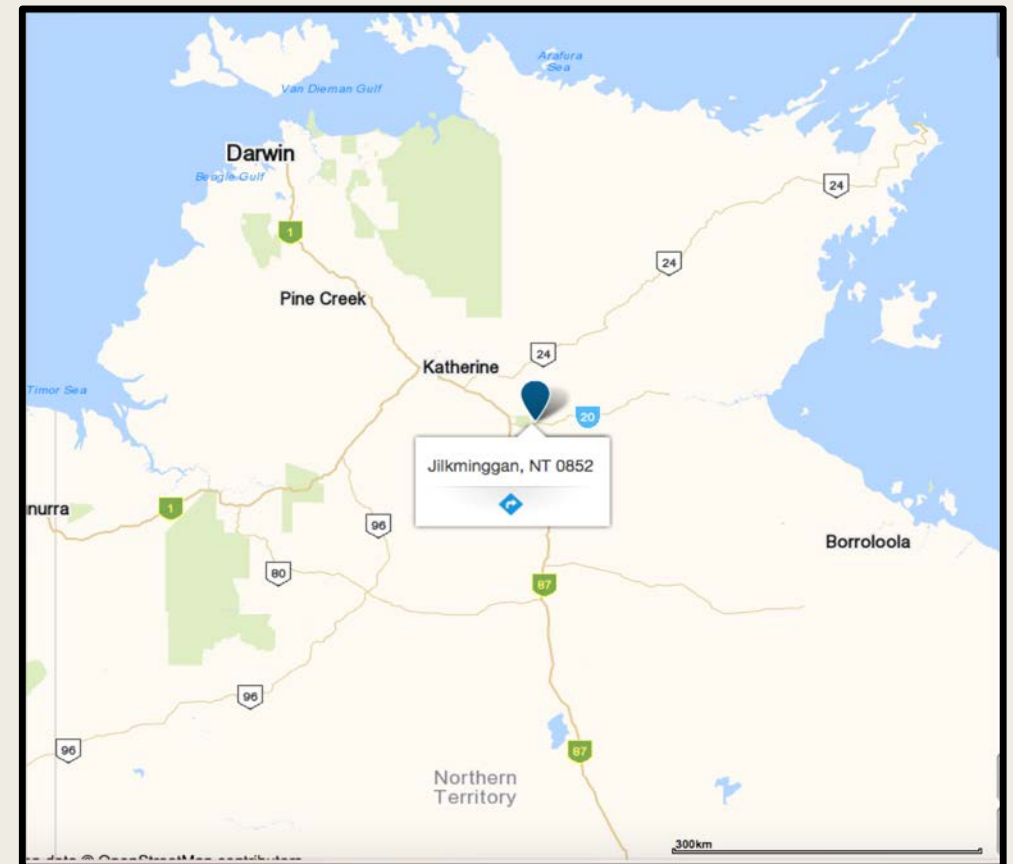
Languages:

- *Traditionally:* Mangarrayi - complex grammar with prefixes and suffixes
- *Today:* mainly Kriol
- One fluent speaker in the community today



Elder Sheila Conway

- others with range of passive knowledge



Language in Context



Language: Hungarian

Meaning: Attention please, the doors are closing.

Context: metro train platform in Budapest

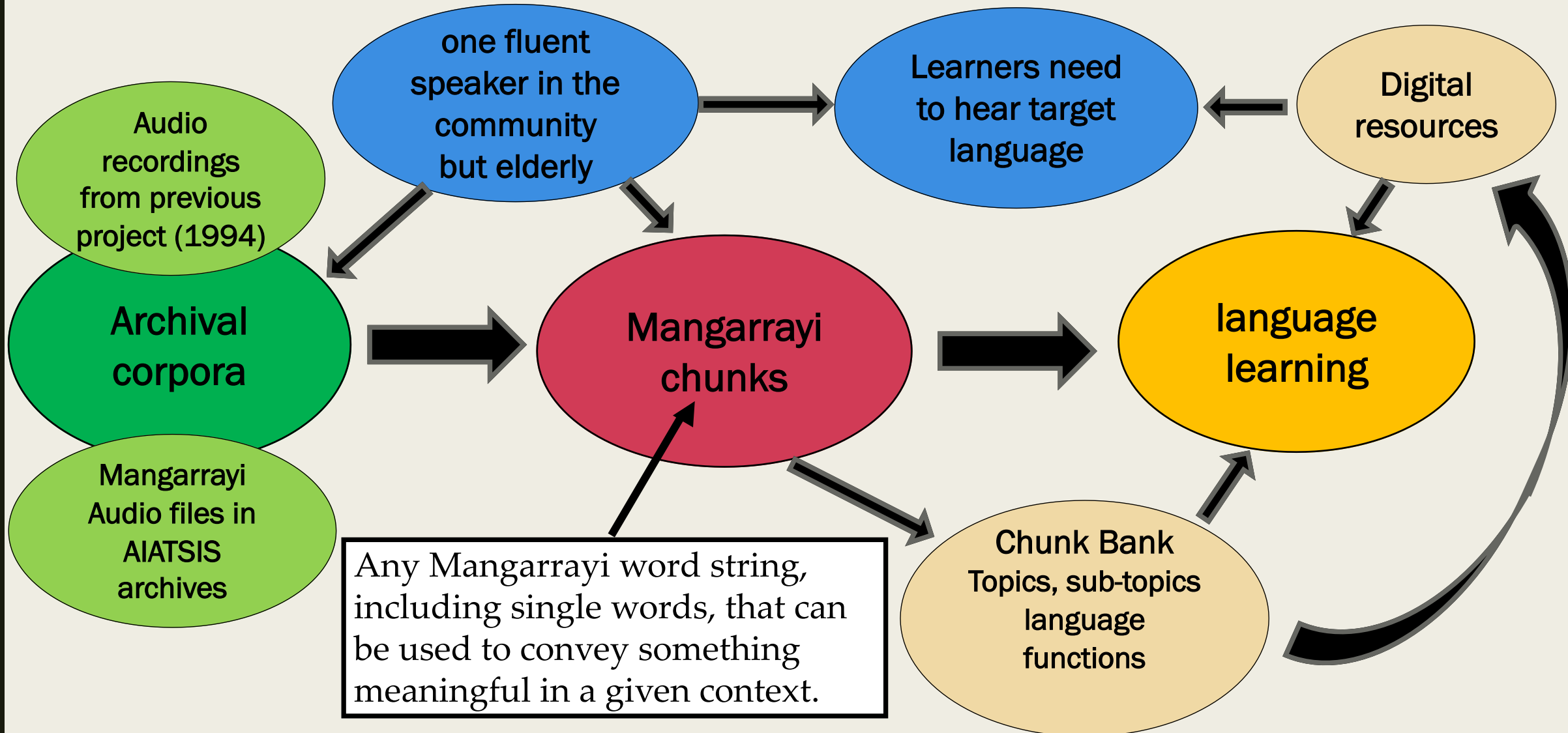


<https://www.youtube.com/watch?v=8N56L8hjRzo>

❖ Language and context:

- language very closely tied to **certain** contexts
- relationship between language and context of use proved to be more complex than initially thought (Wilkins 1972:4)
- content of utterances likely to occur in a given situation reveals language forms of most value to learners

Elements of the Project



Early Phases

Previsits: two visits to Jilkminggan to community to inform research

Research Question 1: What technical, linguistic, meta-linguistic & pedagogic knowledge and skills do community members currently possess that will help them access corpora, capture Mangarrayi word strings and create learning resources?

Study 1: What community members want to say in Mangarrayi
everyday language

Study 2: Use of technology at Jilkminggan
mobile phones, PowerPoint

Study 3: Observation of community members engaging with archival audio files:
chunking of longer recordings into **meaningful** units can make them more manageable and **slowing recordings** can help learners mimic audio exemplars (See also Wray and Perkins 2000; Amery 2009, 2016)

Chunkbank

- ❖ Chunks of *everyday* language captured from longer recordings from AIATSIS archive and put into database
- ❖ Organisational structure derived from Threshold 1990 (van Eck & Trim 1991):
 - ✓ Topic
 - ✓ Sub-topic
 - ✓ Language function

	A	B	C	D	E	F	G
		TOPIC:	HEALTH				
7		SUB-	LANGUAGE	MANGARRAYI	ENGLISH	SOUND FILE	SPEAKER
		TOPICS	FUNCTION				
7.3.1.		Sickness	Asking what's wrong	Jananggarri-ba ga-nya-murrma?	What's wrong with you?	Mang Stories Merlan 13	Sheila Conway
				ga-nya-murrma miliyn-ngangga?	Have you got a sore nose?	MR2-003-B	Amy Dirn.gay
				ngadburr-angga mob nya-mayn?	You broke your hand? / Did you	MR2-003-B	Amy Dirn.gay
				mulugmulug-wa miliyn-ngangga mob nya-	Did you break your nose	MR2-003-B	Amy Dirn.gay
			Saying What's wrong	ga-nga-murrma	I'm sick / I feel sick	Mang Stories Merlan 20	Sheila Conway
				dara-nganju ga-nga-murrma	I have a sore stomach / stomach	Mang Stories Merlan 13	Sheila Conway
				ga-nga-murrma dara-nganju	I have a sore stomach / stomach	Mang Stories Merlan 20	Sheila Conway
				bab-nganju lirlij nga-ma	My head hurts		
				bab-nganju na-miyarr-nganju garrag-wa ga-nga-	my head, my forehead the whole lot	Mang Stories Merlan 14	Sheila Conway
				ga-nga-gar'garma	I'm coughing	Mang Stories Merlan 15	Sheila Conway
				na-mirnurr ga-ngan-bu-n na-barlanggan	I have a new cold (a cold hit me)	Mang Stories Merlan 15	Sheila Conway
			Giving	bordewg mangaya nga-jirray	Maybe I ate something bad	Mang Stories Merlan 18	Sheila Conway
				ngurlg mamayanggan	old fat	Mang Stories Merlan 18	Sheila Conway
				galiya nga-yinyi	I went (walked) a long way	Mang Stories Merlan 16	Sheila Conway
				na-muj ngan-darlag	a native bee bit me / Native bees	Mang Stories Merlan 17	Sheila Conway
				warlarrwarlarrmin ja-nidba	He/she has diarrhea	Mang Stories Merlan 18	Sheila Conway
			Giving advice	yag mayawa gurrwaran-garlama medicine-gu	Go now to the doctor for medicine	Mang Stories Merlan 22	Sheila Conway
				a-nyan-wu-n a-nya-yag barnam-garlama a-nya-	When he has given it to you should	Mang Stories Merlan 22	Sheila Conway
				marrb-nama	tie it up / bandage it up	MR2-003-B	Amy Dirn.gay
				ijjga mawuj a-nga-ja	I will eat a little something to eat	MR2-003-B	Amy Dirn.gay
				ja-murrma, jard la-judma marri-yu	He's/she's sick send him/her home	MR2-015-A	Sheila Conway
			Saying what action you will take	jard ga-nga-jaygi-n mamaya ga-nga-yu	I'm going back to camp first to	Mang Stories Merlan 14	Sheila Conway
				jard ga-nga-jaygin barnam-garlama	I'm going back to camp	Mang Stories Merlan 20	
				a-nga-wurrbarjin-gu a-nga-ninga-n	I'll come back when I feel better.	Mang Stories Merlan 14	Sheila Conway
				gurrwaran-garlama qa-nga-yag	I'm going to the doctor	Mang Stories Merlan 19	Sheila Conway

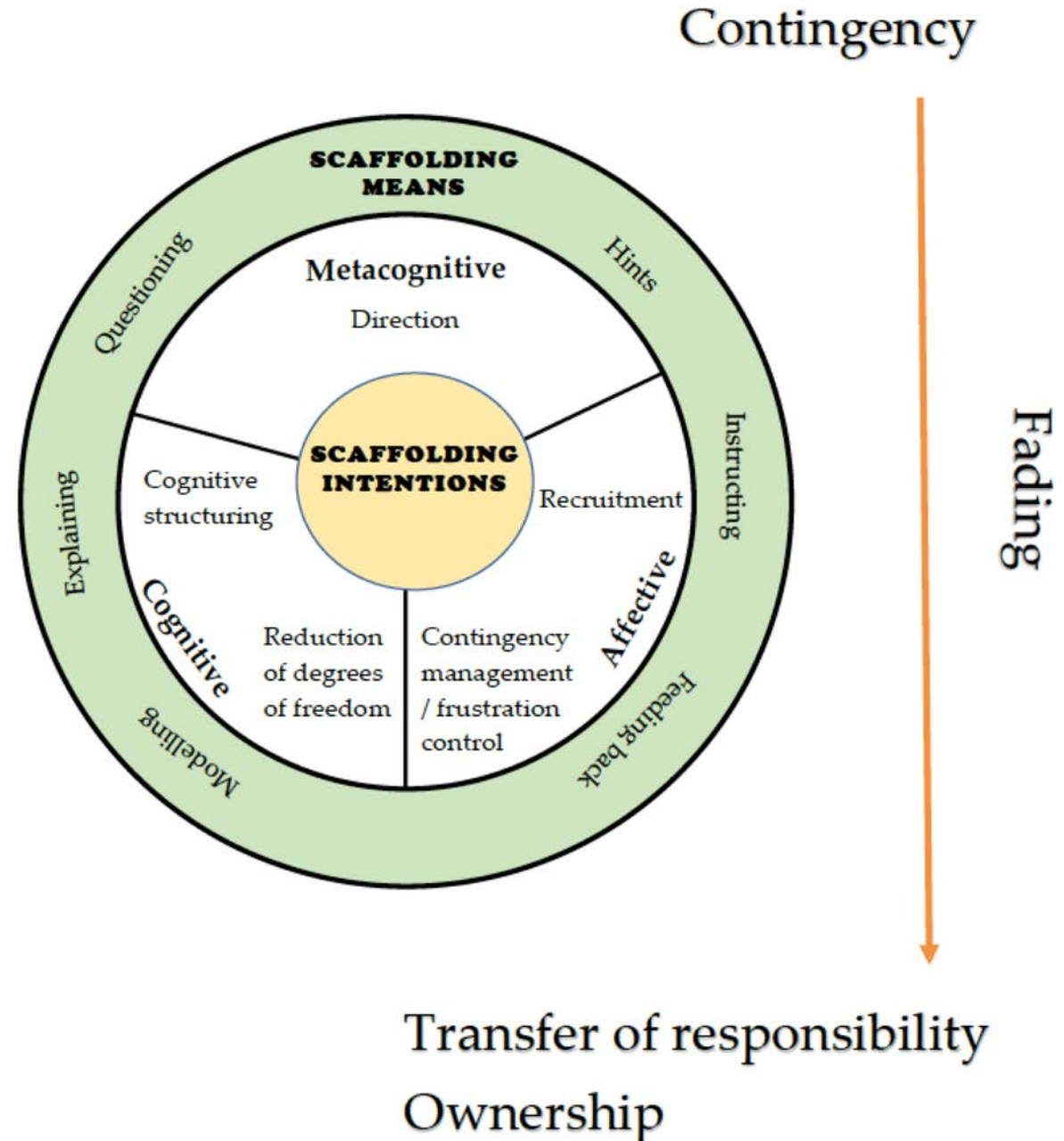
Scaffolding Framework

Scaffolding:
any combination of scaffolding
intention and scaffolding
means

Wood et al. (1976:90)

Scaffolding to support Independence

Adapted from Van de Pol et al., 2010



Research Question 2

How can captured Mangarrayi word strings and digital resources making use of these help scaffold learning and promote more independent learning?

Study 4

Authentic design task

- Work in groups to create a short video based around sub-topic of *Sickness* within the general topic of *Health* using Mangarrayi
- Purpose of video to serve as a Mangarrayi learning resource modeling language in context.



❖ The scaffolding of two kinds:

1. face-to-face support from a linguist with experience in language teaching – Metalinguistic focus
2. A chunkbank resource – Linguistic focus

❖ Data collection included:

1. video and audio recordings of the sessions
2. pre and post block interviews,
3. my observations during the sessions
4. my post session reflections



What we did Block 1

session 1

Participants not the group envisaged more explicit grammar focus than originally anticipated

Session 2

participants asked to choose 1 sentence from each category chunk bank to create script.

What we observed

- ✓ engagement but lost sight of end goal
- ✓ each group produced a script with at least the minimum elements
- ✓ More focused on the goal



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				bal-nganju lirlij nga-ma	My head hurts		
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			Giving	borlewq mangaya nga-jirray	Maybe I ate something bad	Mang Stories Merlan 18	Sheila Conway
				ngurlq mamayanggan	old fat	Mang Stories Merlan 18	Sheila Conway
				gal ya nga-yinyi	I went (walked) a long way	Mang Stories Merlan 16	Sheila Conway
				na-muj ngan-darlag	a native bee bit me / Native bees	Mang Stories Merlan 17	Sheila Conway
				walarrwarlarrmin ja-nidba	He/she has diarrhea	Mang Stories Merlan 18	Sheila Conway
			Giving advice	yan mayawa gurrwaran-garlama medicine-gu	Go now to the doctor for medicine	Mang Stories Merlan 22	Sheila Conway
				a-nyan-wu-n a-nya-yag barnam-garlama a-nya-	When he has given it to you should	Mang Stories Merlan 22	Sheila Conway
				marrb-nama	tie it up / bandage it up	MR2-003-B	Amy Dirn.gay
				jiga mawuj a-nga-ja	I will eat a little something to eat	MR2-003-B	Amy Dirn.gay
				ja-murrma, jard la-judma marri-yu	He's/she's sick send him/her home	MR2-015-A	Sheila Conway
			Saying what action you will take	jard ga-nga-jaygi-n mamaya ga-nga-yu	I'm going back to camp first to	Mang Stories Merlan 14	Sheila Conway
				jard ga-nga-jaygin barnam-garlama	I'm going back to camp	Mang Stories Merlan 20	
				a-nga-wurrbarjin-gu a-nga-ninga-n	I'll come back when I feel better.	Mang Stories Merlan 14	Sheila Conway
				gurrwaran-garlama ga-nga-yag	I'm going to the doctor	Mang Stories Merlan 19	Sheila Conway

Session 3

participants created simple PowerPoint learning tool to help learn script

- ✓ all participants successfully created a resource
- ✓ Grammar at moment of need

Session 4

Participants chose location and shot film using the script produced

- ✓ both groups got some footage
- ✓ neither got all that they had planned



What we did Block 2	What we observed
Observation of community members collecting bush medicine	✓ some traditional knowledge/skills still part of Jilkminggan community life
Acting out preparation of bush medicine: 1. to help elicit language from speaker 2. to film community members using chunks for video creation	✓ more concrete context allowed speaker to offer appropriate language ✓ footage of adult community member and younger community member using Mangarrayi in context
Observation of Community Elder's attitude to the process and helping younger member to say her lines in Mangarrayi	✓ this was generally positive ✓ broke language into small chunks of a few syllables, spoke slowly – mostly successful helping learner to repeat - not always



What we did Block 3 - Case Studies

Group 1: **Young adult community members** who have expressed a desire to learn Mangarrayi. Observed how they engaged with the chunkbank and other digital learning resources using PowerPoint.



What we observed

successfully able to:

- ✓ download PowerPoint to phone
- ✓ download and open learning resources from Dropbox
- ✓ use chunkbank and learning resource

Group 2: **Older community members** with stronger background knowledge of Mangarrayi – grew up with the language. Observed how they engage with digital resources & chunk bank; how they engage with different devices (computer, i-pad, telephone, USB for television);

- ✓ They more often knew the meanings of chunks from just hearing them
- ✓ The resources reminded them of language
- ✓ USB into a TV was their preferred way of engaging with digital technology

Who is the expert?

- Original conception of scaffolding (Wood et al) – **expert** supports **novice**
- Sheila only expert Mangarrayi speaker– age and health make it difficult to take a teaching role. She remains the ultimate authority
- Archival recordings can have authority, especially when the speakers are known to community members – ie fulfill the language expert role

(Wood et al. 1976, van de Pol 2010)

Chunkbank as scaffolding

Resource: **enabling environment** (Meyer et al. 2008); **mediated interaction** (Moore, 1973: 663)

SCAFFOLDING INTENTIONS

❖ Metacognitive domain

- **Direction Maintenance:** keep learners focussed as utterances appropriate to context

❖ Cognitive domain

- **Cognitive structuring:** organisational together with translation supports comprehension and usage
- **Reduction of degrees of Freedom (task simplification):** ready-made chunks that can be used as they are or with minimal changes

❖ Affective domain

- **Recruitment:** clear starting point and direction & immediate sense that participants are achieving bigger goal of learning some Mangarrayi
- **Contingency management/frustration control:** ready-made chunks make task doable for community members with range of knowledge

Chunkbank as scaffolding

SCAFFOLDING MEANS

- **Modelling:** modelling language use in a given context
- **Giving of hints:** The chunks are only part of the knowledge needed to use Mangarrayi to communicate
- **Feedback:** ready-made chunks provide feedback as to correct usage
- **Instructing:** Following the structure of the of the language functions learners can create a simple dialogue
- **Explaining:** the information provided explains how and when to use the chunk and what it communicates in the context.
- **Questioning:** ???

Insights

1. Feedback from participants in Block 1– glossing words and affixes would be useful. A form of **explanation** of grammar & structure constitutes a **scaffolding means**. This relates to the scaffolding means of *Explanation*. On the basis of this we modified the chunkbank.

	A	B	C	D	E	F	G
1		TOPIC: HEALTH & BODY CARE					
2	7	Sub-topic	Language	Mangaray	English	Soundfile	Speaker
3	7.3.1.1	Sickness	Asking what's	Jananggarri-ba ga-nya-murrma? what? main word Pres you sick	What's wrong with you?	Mang Stories Merlan_13	Sheila Conway
4				ga-nya-murrma miliyn-ngangga? Pres you sore nose your	Have you got a sore nose?	MR2-003-B	Amy Dirn.gayg
5				ngadburr-angga mob nya-mayn? hand your break you	You broke your hand? / Did you	MR2-003-B	Amy Dirn.gayg
6				mulugmulug-wa miliyn-ngangga mob nya-mayn? yesterday Emph nose your broke (Past) you/it	Did you break your nose	MR2-003-B	Amy Dirn.gayg
7			Saying What's Wrong	ga-nga-murrma Pres I sick	I'm sick / I feel sick	Mang Stories Merlan_20	Sheila Conway
8				dara-nganju ga-nga-murrma stomach my Pres I sore	I have a sore stomach / stomach	Mang Stories Merlan_13	Sheila Conway
9				ga-nga-murrma dara-nganju Pres I sore stomach my	I have a sore stomach / stomach	Mang Stories Merlan_20	Sheila Conway
10				bab-nganju lirlij nga-ma	My head hurts		
11			Giving	bordewg mangaya nga-jirray bad maybe I/it ate (Past)	Maybe I ate something bad	Mang Stories Merlan_18	Sheila Conway
12				ngurlg mamayanggan animal fat old	old fat	Mang Stories Merlan_18	Sheila Conway
13				galiya nga-yinyi	I went (walked) a long way	Mang Stories Merlan_16	Sheila Conway
14			Giving advice	yag mayawa gurrwaran-garlama medicine-gu go now doctor to medicine for	Go now to the doctor for medicine	Mang Stories Merlan_22	Sheila Conway
15				a-nyan-wu-n a-nya-yag barnam-garlama a-nya-yu will give he/you should you go camp to should	When he has given it to you should to camp and you should sleep	Mang Stories Merlan_22	Sheila Conway
16			Saying what you are going to take	iard ga-nga-jaygi-n mamaya ga-nga-yu go back Pres I first Pres I sleep	I'm going back to camp first to	Mang Stories Merlan_14	Sheila Conway
17				iard ga-nga-jaygin barnam-garlama	I'm going back to camp	Mang Stories Merlan_20	

Insights

1. Feedback from participants in Block 1– glossing words and affixes would be useful. A form of **explanation** of grammar & structure constitutes a **scaffolding means**. On the basis of this we modified the chunkbank.
2. Humour in the sessions was an important scaffolding strategy – scaffolding means relating to affect

Original chunk:

Jorroy-wu ga-nga-yag = **I** am going for Jorroy

By changing one element (bound pronoun) you get:

Jorroy-wu ga-ngi-yag = **You and I** are going for bush medicine

Jorroy-wu ga-ngirr-yag = **He and I** are going for bush medicine (not the person spoken to)

Jorroy-wu ga-ngirla-yag = **They and I** are going for bush medicine (not the person spoken to)

Jorroy-wu ga-ngarla-yag = **We all** are going for bush medicine (including the person spoken to)

Jorroy-wu ga-ngarr-yag = **We three** are going for bush medicine (including the person spoken to)

Insights

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3. Contingency: using chunkbank prompted users to reflect on grammar and structure – grammar explanation (face-to-face or gloss) at point of need more effective than upfront explicit grammar as in session 1

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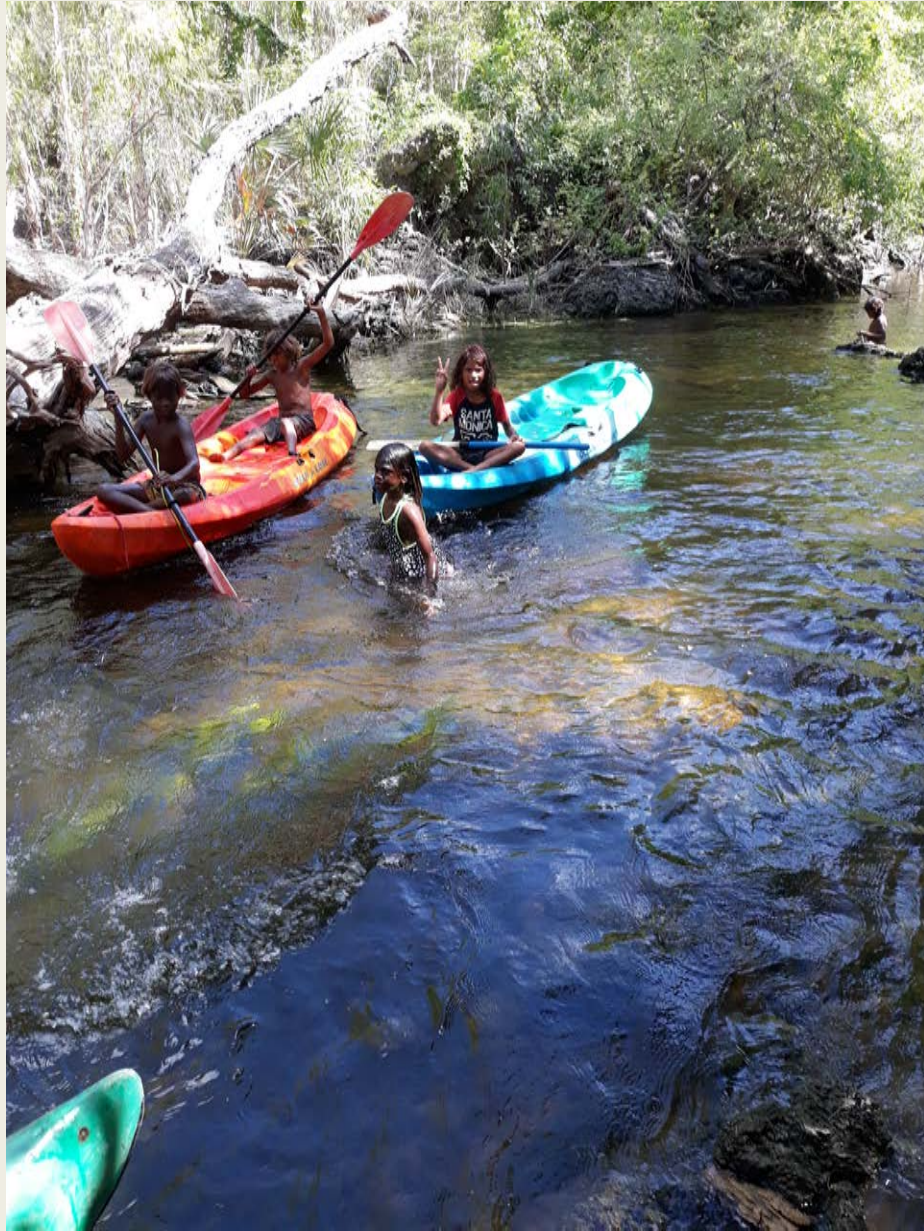
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4. Transfer of responsibility / ownership: Josie essential co-researcher
 - ✓ took responsibility for recruitments and encouragement of participants
 - ✓ Took responsibility for filming & editing
 - ✓ Sitting down with elder Sheila Conway to talk about language relevant language.

Remember Language!

Sheila Conway



We found good country. We were running this way and that looking for water. They (the old people) brought us here (to Jilkmिंगgan) looking for water. We came to a high place and found it (water). We stayed here permanently together and we are still here. Children can play and grow up and they can speak language, like me. They taught us language. You (Mangarrayi people) leave English, it's not yours. English is for White people. Listen, we talk our language



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